



JC06 Rec'd PCT/PTO 09 MAY 2005  
TENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: LEONHARTSBERGER ET AL.-2 PCT

SERIAL NO.: 10/530,843 GROUP:

FILED: APRIL 8, 2005

TITLE: FEEDBACK-RESISTANT HOMOSERINE TRANSSUCCINYLASES

SUBMISSION OF INFORMATION DISCLOSURE  
STATEMENT OF DR. HOLGER POTEN

MAIL STOP NON-FEE AMENDMENT

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

Applicants wish to bring to the attention of the Patent Examiner the attached Information Disclosure Statement, duly signed by Dr. Holger Potten, and the references listed on the enclosed Form PTO-1449 and attached thereto. It is respectfully requested that the foregoing Information Disclosure Statement be incorporated into the official file of the present patent application.

Respectfully submitted,  
LEONHARTSBERGER ET AL.-2 PCT

  
Allison C. Collard, Reg. No. 27,532  
Edward R. Freedman, Reg. No. 26,048  
Elizabeth Collard Richter, Reg. No. 35,103  
Attorneys for Applicant

COLLARD & ROE, P.C.  
1077 Northern Boulevard  
Roslyn, New York 11576  
(516) 365-9802  
ECR:lgh

Encs: Information Disclosure Statement of Dr. Holger Potten, International Search Report, PTO-1449 form and sixteen (16) references

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on May 5, 2005.

  
Melissa Konko

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
LEONHARTSBERGER ET AL. :  
Serial Number 101530,843 : Group Art Unit:  
Filed: April 8, 2005 :  
For: :  
FEEDBACK-RESISTANT HOMOSERINE TRANSSUCCINYLASES

Information Disclosure Statement

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir or Madam:

I, Holger Potten, associated with the preparation and prosecution of the above-identified application, residing at Neubiberger Straße 17a, 81737 München, Germany, wish to call the attention of the Patent Examiner to the references enumerated on the enclosed PTO Form-1449.

I believe the documents enumerated on the enclosed Form PTO-1449 and attached thereto, are cited in the enclosed International Search Report and may be material to the examination of the application.

Therefore, it is respectfully requested that the foregoing Information Disclosure Statement be considered by the Examiner and incorporated into the file of this application.

I wish to comment as follows concerning the prior art references enumerated on PTO Form-1449:

US 5,120,837, cited in the application, is already in English language.

US 5,698,418, cited in the International Search Report, is already in English language.

US 2002/0106800 A1, cited in the International Search Report, is already in English language.

EP 0 745 671 A2, cited in the application, is already in English language.

JP 2000-139471-A, cited in the application, the English Thomson Derwent translation is enclosed.

MORINAGA ET AL.: "Regulatory Properties of L-Methionine Biosynthesis in Obligate Methylotroph OM 33: Role of Homoserine-0-transsuccinylase", Agric. Biol. Chem., Vol. 46, No. 1, 1982, Pages 57 – 64, cited in the International Search Report, is already in English language.

BOURHY ET AL.: "Homoserine 0-Acetyltransferase, Involved in the *Leptospira meyeri* Methionine Biosynthetic Pathway, Is Not Feedback Inhibited", Journal of Bacteriology, July 1997, Vol. 179, No. 13, Pages 4396 – 4398, cited in the International Search Report, is already in English language.

DUCLOS ET AL.: "Nucleotide sequence of the *metA* gene encoding homoserine *trans*-succinylase in *Escherichia coli*", Nucleic Acids Research, 1989, Vol. 17, No. 7, Page 2856, cited in the International Search Report, is already in English language.

LAWRENCE ET AL.: "Regulation of Methionine Synthesis in *Salmonella Typhimurium*: Mutants Resistant to Inhibition by Analogues of Methionine", Genetics, April 1968, Vol. 58, Pages 473 – 492, cited in the application, is already in English language.

KREDICH ET AL., TOMKINS ET AL.: "The Enzymic Synthesis of L-Cysteine in *Escherichia coli* and *Salmonella typhimurium*", The Journal of Biological Chemistry, 1966, Vol. 241, No. 21, Pages 4955 – 4965, cited in the application, is already in English language.

LEE ET AL.: "Multimetabolite Control of a Biosynthetic Pathway by Sequential Metabolites", The Journal Of Biological Chemistry, 1966, Vol. 241, No. 22, Pages 5479 – 5480, cited in the application, is already in English language.

SHIOZAKI ET AL.: "S-Adenosyl-L-methionine Production by *Saccharomyces sake*: Optimization of the Culture Conditions for the Production of Cells with a High S-Adenosyl-L-methionine Content", Agric. Biol. Chem., 1989, Vol. 53, No. 12, Pages 3269 – 3274, cited in the application, is already in English language.

SCHLENK ET AL., DePALMA ET AL.: „The Preparation of S-Adenosylmethionine“, J. Biol. Chem., 1957, Pages 1037 – 1050, cited in the application, is already in English language.

GREENE ET AL.: "Biosynthesis of Methionine" in Neidhardt F.C., *Escherichia coli* and *Salmonella typhimurium*, Cellular and molecular biology, 2<sup>nd</sup> Edition, ASM Press, Washington DC 1996, Pages 542 – 560, cited in the application, is already in English language.

HORNUNG ET AL.: "Conversion of cucumber linoleate 13-lipoxygenase to a 9-lipoxygenating species by site-directed mutagenesis", Proc. Natl. Acad. Sci., USA, March 1999, Vol. 96, Pages 4192 – 4197, cited in the German office action, is already in English language.

BORN ET AL.: "Enzyme-catalyzed acylation of homoserine: mechanistic characterization of the *Escherichia coli* *metA*-encoded homoserine *trans*succinylase", Biochemistry 1999, Vol. 38, No. 43, Pages 14416 – 14423, cited in the German office action, an English abstract is enclosed.

Signed this 11 day of April, 2005.



.....  
Dr. Holger Potten

FORM PTO-1449  
(REV. 7-80)U. S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY DOCKET NO: LEONHARTSBERGER ET AL. - 2627SERIAL NO 10/530,843

## LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT: LEON HARTSBERGER ET AL.  
FILING DATE: APRIL 8, 2005 GROUP:

## U. S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA		<u>5,120,837</u>	<u>06/09/92</u>	<u>Fotheringham et al.</u>			
AB		<u>2002/0106800</u>	<u>08/08/02</u>	<u>Liaw et al.</u>			
AC		<u>5,698,418</u>	<u>12/16/97</u>	<u>Brunner et al.</u>			
AD							
AE							
AF							
AG							
AH							
AI							
AJ							
AK							

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
AL		<u>0745671 A2</u>	<u>12/04/96</u>	<u>Europe</u>				
AM		<u>2000-139471-A</u>	<u>05/23/00</u>	<u>Japan</u>				
AN								
AO								
AP								

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Thomson Delwent corresponding to JP 2000-139471-A.		
AS	<u>Morinaga et al., AGIC. Biol. Chem., VOL. 46, NO. 1, 1982, pages 57-64.</u>		
AT	<u>Soury et al., Journal of Bacteriology, VOL. 179, NO. 13, July 1997, pages 4396-4398.</u>		

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449  
(REV 7-80)U. S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY DOCKET NO: LEON HARTSBERGER  
ET AL-2005SERIAL NO 10/530,843

## LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT:

LEON HARTSBERGER ET AL.FILING DATE: APRIL 8, 2005

GROUP:

## U. S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AL							
	AM							
	AN							
	AO							
	AP							

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	JUICIO et al., "Nucleotide sequence of the metA gene encoding homocysteine trans-succinylase in Escherichia coli", Nucleic Acids Research, Vol. 17, No. 7, Page 2856	
AS	Lawrence et al., Smith et al.; Genetics, Vol. 58, April 1968, Pages 473-492.	
AT	Kredich et al., Tomkins et al., "The Enzymic Synthesis of L-Cysteine in Escherichia coli and salmonella typhimurium", J. Biol. Chem., Vol. 241, No. 21, Pages 4955-4965	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449  
(REV 7-80)U. S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY DOCKET NO: LEONHARTSBERGER ET AL - 7407 SERIAL NO 10/530,843

## LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT: LEONHARTSBERGER ET AL.FILING DATE: APR 18, 2005 GROUP:

## U. S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AL							
	AM							
	AN							
	AO							
	AP							

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Lee et al.	"Multimetabolite control of a Biosynthetic Pathway By Sequential Metabolites", J. Biol. Chem., Vol. 241, No. 22, 1966, Pages 5479-5480.					
AS	Shiozaki et al.	"Agric. Biol. Chem., Vol. 53, No. 12, 1989, Pages 3269-3274.					
AT	Ghink et al., DePalma et al.	"The Formation of 5-Acetyl-methionine in yeast", J. Biol. Chem., 1957, Pages 1037-1050.					

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

## LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT: LEON HARTISBERGER ET AL.FILING DATE: APRIL 8, 2005 GROUP:

## U. S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AL							
	AM							
	AN							
	AO							
	AP							

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Greene et al., "Biosynthesis of Methionine", ASM Press, Washington 1996, Weidner et al, Escherichia coli and Salmonella typhimurium, Mol Biol, Pages 542-560.	
AS	Huang et al, Walther et al., Kuhn et al., Proc. Natl. Acad. Sci., Vol. 96, 1999, Pages 4192-4197.	
AT	Born et al, Blanchard et al., Biochemistry, Vol. 38, No. 43, Pages 14416-14423 as abstract.	

EXAMINER

DATE CONSIDERED